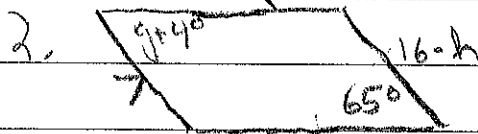
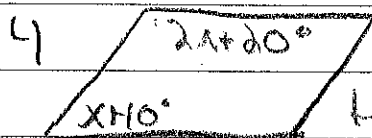


Chapter 8

1. Find the measure of an interior and exterior angle of the regular polygon.
- Regular 16-gon

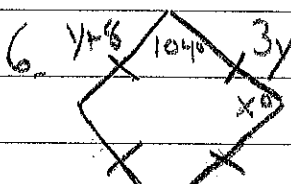


Both figures are parallelograms.
Find the variables.

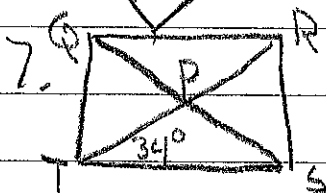


For what value of x is the quadrilateral a parallelogram?

5. $A(-1, 0)$ $B(0, -4)$ $C(8, -6)$ $D(x, y)$
Find D .



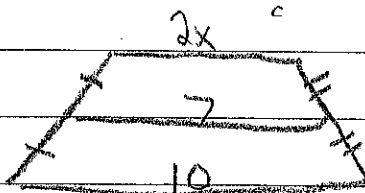
Find the values for x, y and classify the shape.



$QS = 10$

Find... $m\angle SRT$ -
 $m\angle QPR$ -
 QR -
 RP -

8. Find x

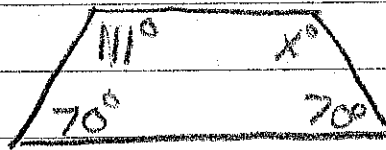


9.



Find the missing \angle 's

10. Tell whether enough information is given in the diagram to classify the quadrilateral. Then classify. Why?



Chapter 8 Answers

1. $(18-2)180$

$(16)180$

2880° interior $<$ sum

360° exterior $<$ sum

2. $y+4=65$

$16-h=7$

$y=61^\circ$

$-h=-9$

$h=9$

3. $2y-1=9$

$12=x+3$

$2y=10$

$x=9$

$y=5$

4. $2x+20 + x+10=180$

$3x+30=180$

$3x=150$

$x=50$

5. $MAC \left(\frac{8-1}{2}, \frac{-6-0}{2} \right) = \left(\frac{7}{2}, -3 \right)$

$MBD \left(\frac{7}{2}, -3 \right) = \left(\frac{x-0}{2}, \frac{y-4}{2} \right)$

$\left(\frac{7}{2}, -3 \right) = \left(\frac{x}{2}, \frac{y-4}{2} \right)$

$\frac{0+x}{2} = \frac{7}{2}$

$\frac{y-4}{2} = -3$

$2x=14$

$y-4=-6$

$x=7$

$y=-2$

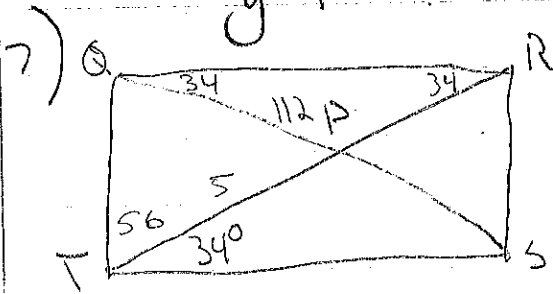
$D(7, -2)$

→

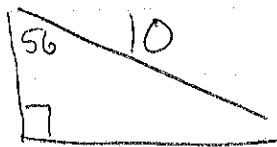
$$\begin{aligned}
 6. \quad 3y &= y + 8 \\
 2y &= 8 \\
 y &= 4
 \end{aligned}$$

$$\begin{aligned}
 104 + x &= 180 \\
 x &= 76^\circ
 \end{aligned}$$

Rhombus; all sides are \cong

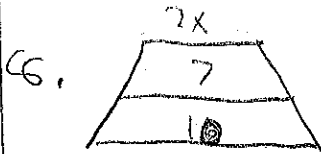


$$\begin{aligned}
 m\angle SRT &= 56^\circ \\
 m\angle QPR &= 112^\circ \\
 QR &= 6.3 \\
 RP &= 5
 \end{aligned}$$



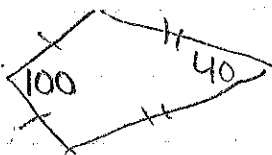
$$\sin(56) = \frac{x}{10}$$

$$x = 6.3$$



$$\begin{aligned}
 7 &= \frac{1}{2}(2x + 10) \\
 14 &= 2x + 10 \\
 x &= 2
 \end{aligned}$$

9.



$$\begin{aligned}
 360 &= 100 + 40 + 2x \\
 x &= 110^\circ
 \end{aligned}$$

10. Quadrilateral, because it has 4 sides, only 2 \cong \angle 's